GLOBAL eLEARNING: PERSPECTIVES FROM ASIA

Michihiko MINOH

Center for Information and Multimedia Studies

Kyoto University, Japan

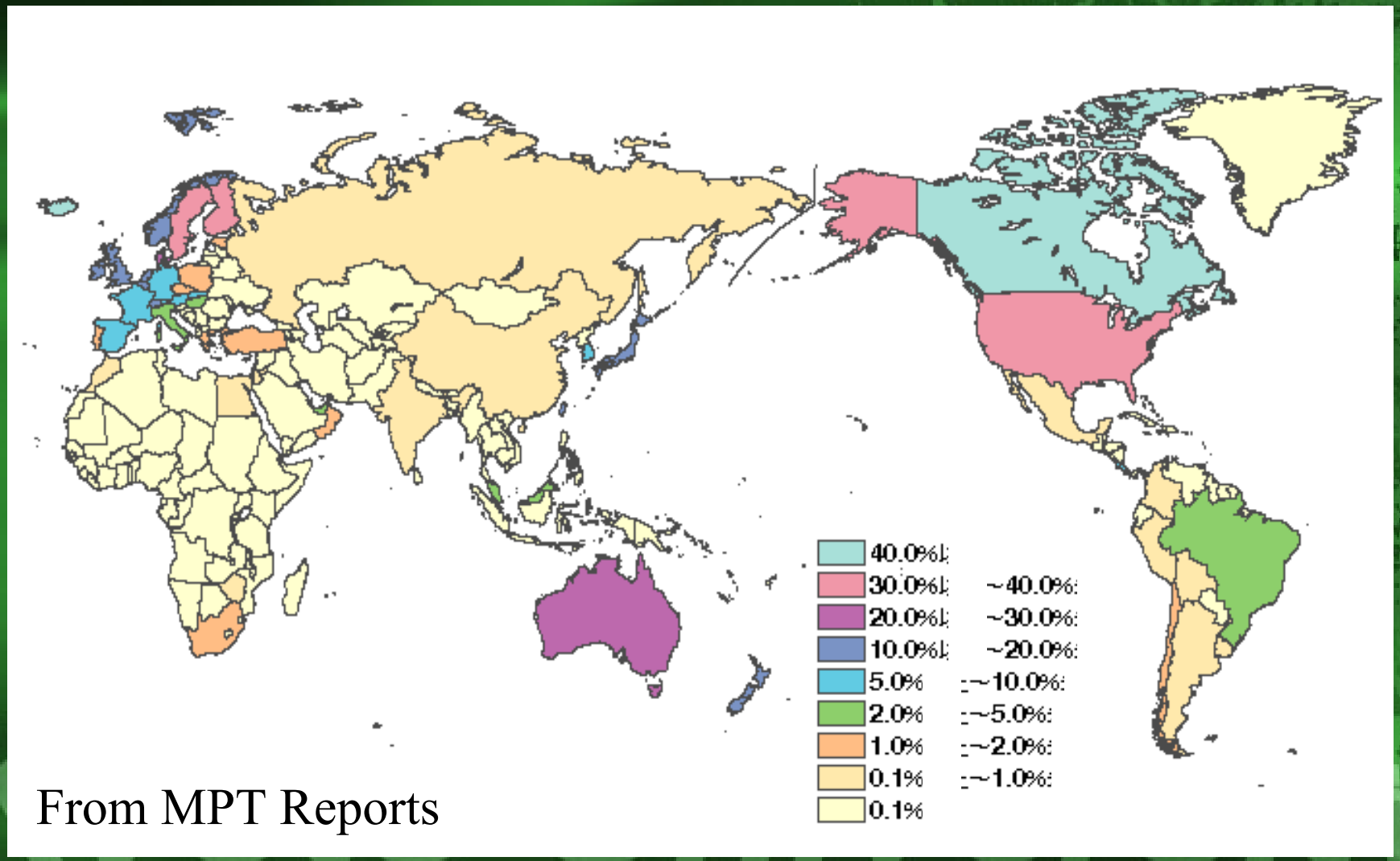
Kyoto University

IT infrastructure in Asia

- Ratio of the number of internet domains in the world
  - Japan 3.9%
  - Asia & Oceania 7.9%
- Ratio of the number of internet users in the world
  - Asia & Oceania 16.3%

Kyoto University

Popularization of Internet



From MPT Reports

Kinds of education

- Elementary level (Local)
- High school level (Local)
- University level (Global)
- Corporation (Local & Global)
- Life long learning (Local & Global)

Local:Sharing time and space

Global: Individual learning

Kyoto University

Style of learning

Share time and space

Lecture in classroom

Group learning

Individuals

Group

WBT

Collaborative learning

Individuals

Kyoto University

eLearning

- IT in education
  - Emphasize on Web based Training
- All the styles in education can be supported by IT
  - Distance learning between classrooms and groups
  - Collaborative learning

Kyoto University

Cultural problem

- Languages are different
- Religions are different

- The way of learning is different
  - Group or class learning is important in Asia
- The attitudes of people are rather passive than active
  - Teachers have to share time and space with students

Kyoto University

Japan

- Regulation is so strong
  - Graduate certification is very important in Japanese society
  - Only schools admitted can issue the certification
- eLearning is considered to be useful in Life long learning.

Kyoto University

ALIC:Advanced Learning Infrastructure Consortium

- Established in 1999
  - Interoperability of eLearning materials
  - Next generation technology for developing the contents of education
  - Practical use of IT in education
  - Advertisement of the advantage to use IT in education

www.alic.or.jp(only in Japanese)

Kyoto University

eLearning market in Japan

- Elementary, Junior and senior high school
  - 1.4 billion dollar
- University and Graduate school
  - 2.9 billion dollar
- Corporation education
  - 4.1 billion dollar
- Life long learning
  - 1.9 billion dollar

Estimated by NTT data lab.

Kyoto University

Current status in Japan

- In senior high schools, information technology will be taught in this year
- University can admit several credits in distance learning classes
- eLearnings on internet are available for the preparation of certification examination conducted by the government

Kyoto University

Wireless environment

- The number of mobile phones is more than that of the fixed telephones
- Almost half of the students have mobile phones
- Classroom becomes quiet because the students exchange emails during the class

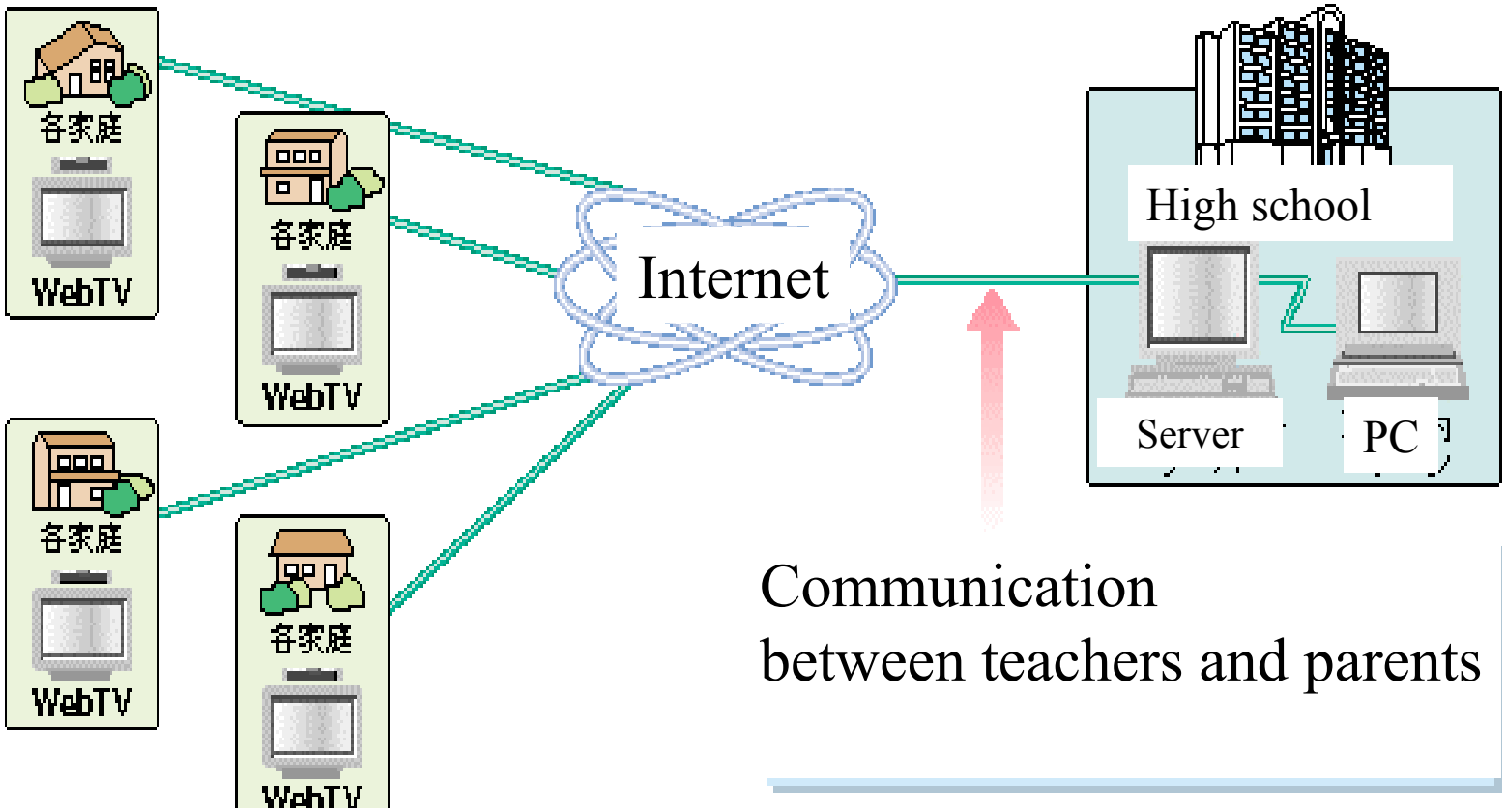
Kyoto University

How IT is used

- Use IT as a supporting tools for the class
  - Multimedia teaching materials
  - Using internet to show real things
  - 3 dimensional models for easy understanding
- To support communication between teachers and parents

Kyoto University

Example of a trial of IT technology



Communication
between teachers and parents

Students home

Trials in Kyoto University

- Distance Learning classes among universities using Satellite Communication System(SCS) provided by the government
- TIDE (Trans-pacific Interactive Distance Education) project
  - An example of class which is offered only by IT technology(not replacing the conventional one)

Kyoto University

TIDE Project

Interactive Distance Learning between Kyoto University and UCLA

- Regular Class
- Credits are given locally

- Joint research
  - Education
  - IT technology
- Three years project since 1999

Kyoto University

Purpose

- Possibility of lecture exchange between USA and Japan
- Compare the lecture styles in different cultures
- Education experiments with IT
  - Camera system
  - Presentation system
  - Network system
  - Content delivery system

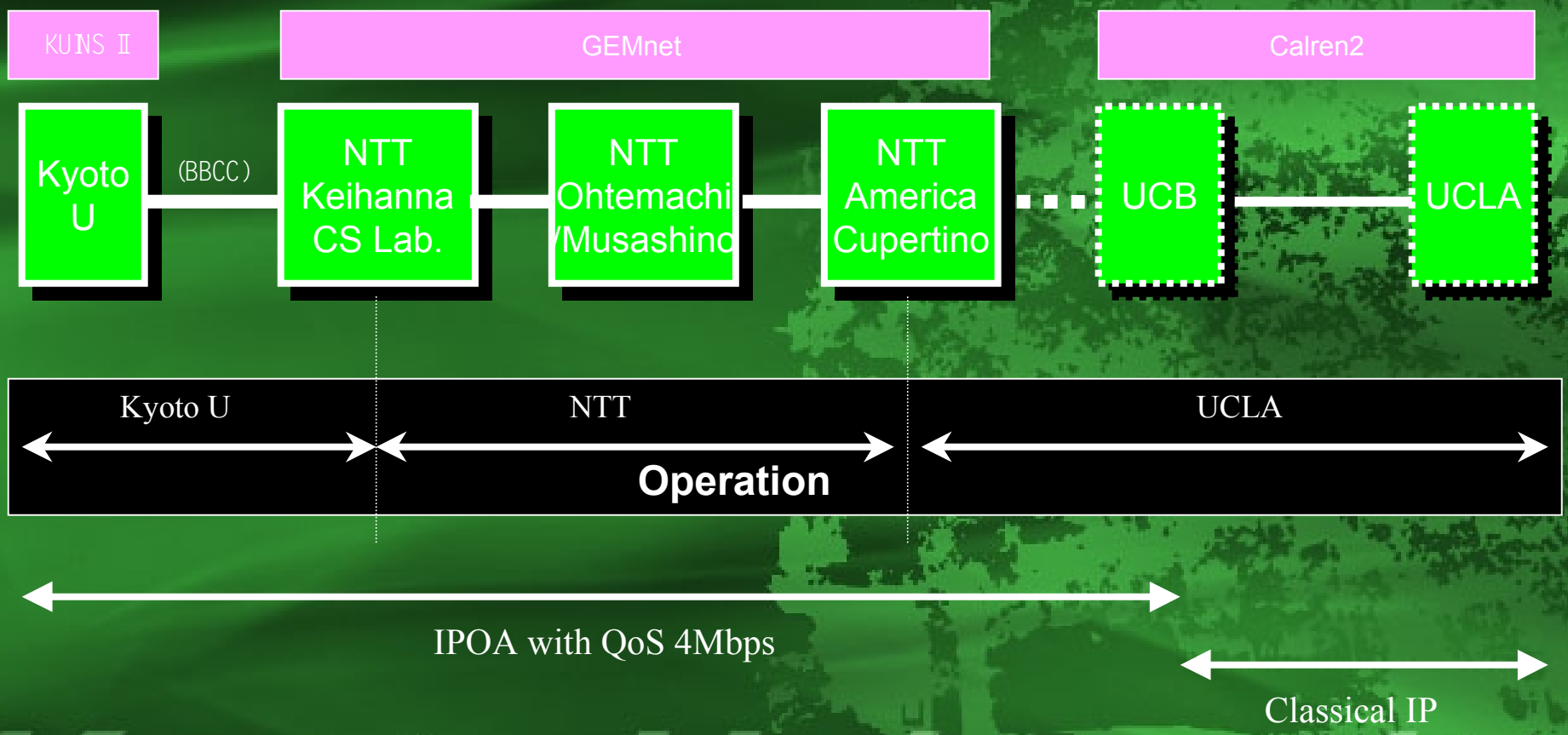
Kyoto University

Subjects

- 1999
  - Space science
  - Physics for poets
- 2000
  - Asia media system
  - ESL
- 2001(plan)
  - Economics
  - Genetics

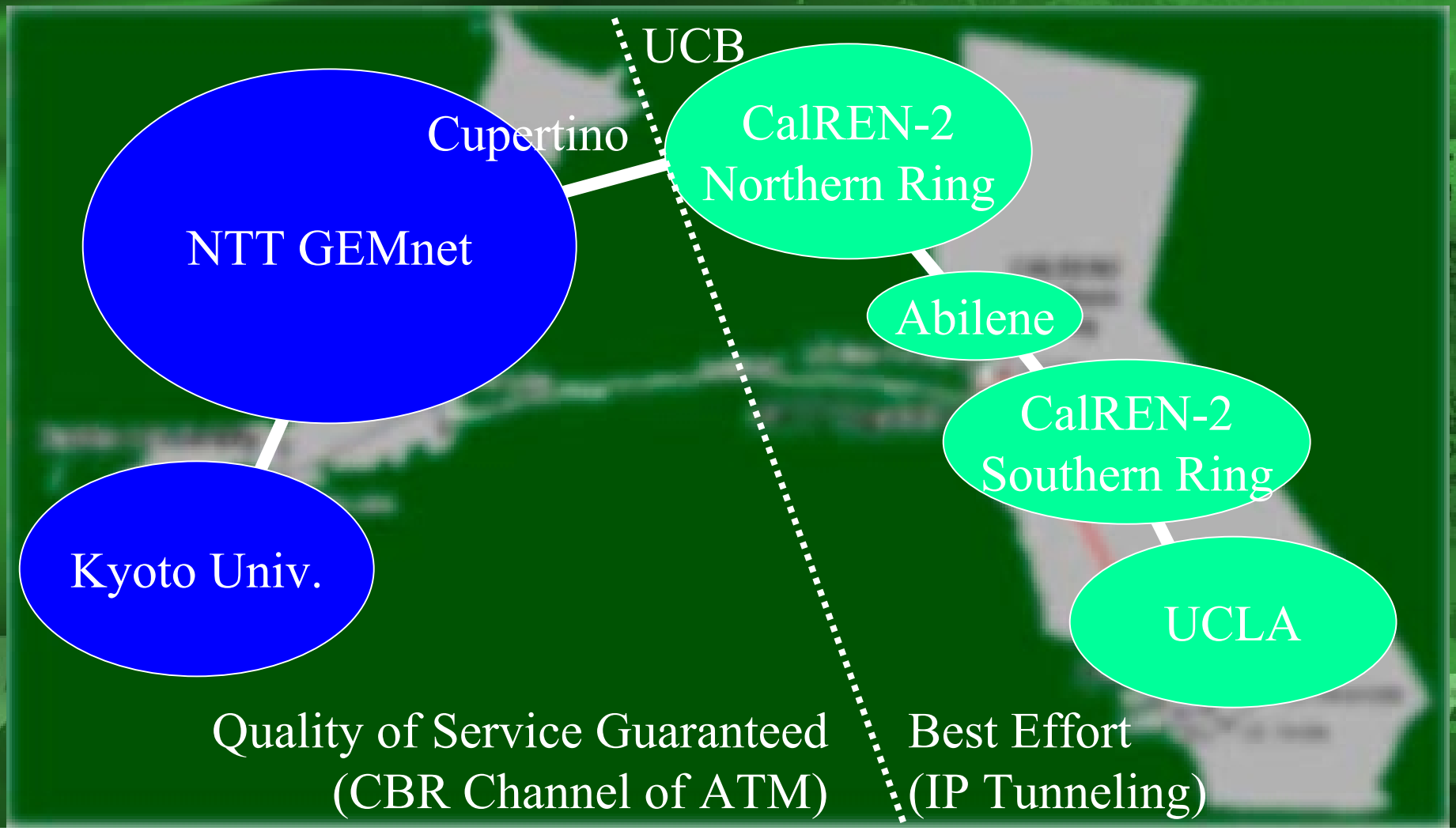
Kyoto University

Network Configuration for Kyoto U - UCLA - NTT Distance Learning Experiment

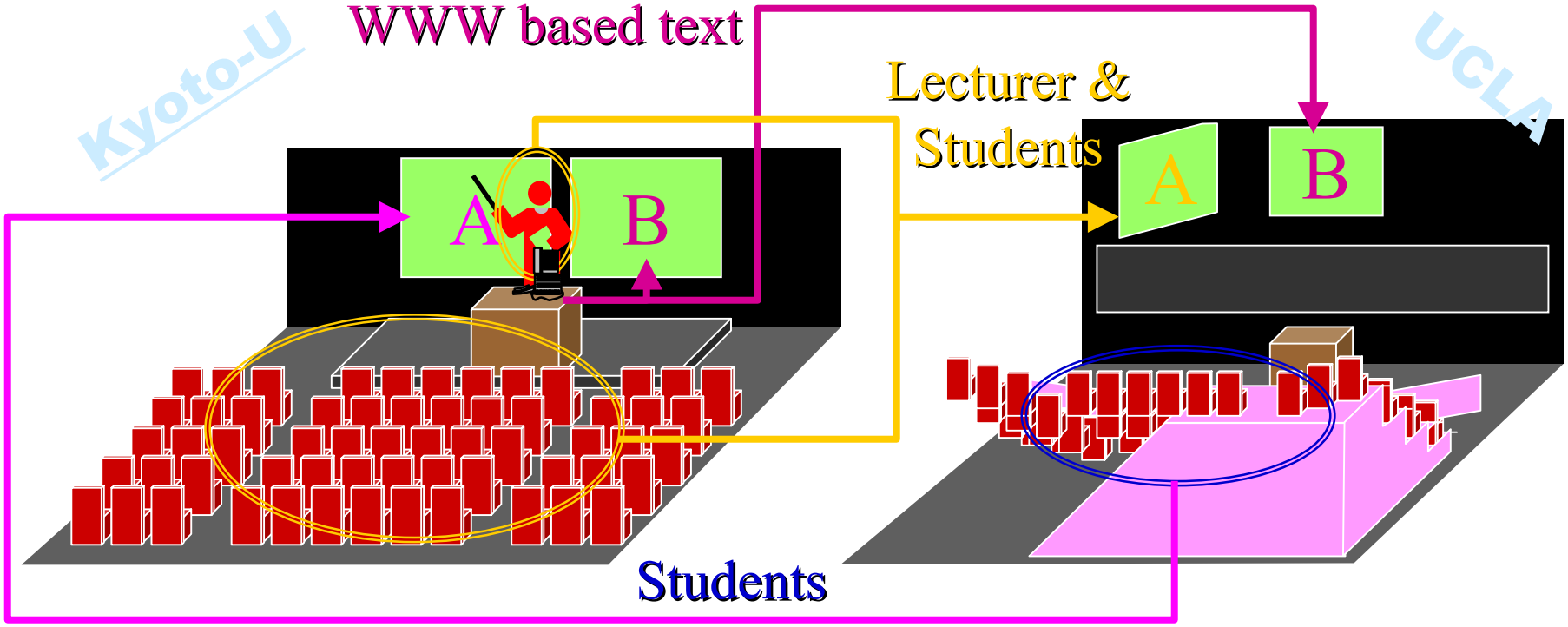


Kyoto University

QoS Guaranteed Network



Lecture from Kyoto-U to UCLA



What we have found

- Both students are very happy
- Interaction is very important
- Cultural topics seems to be more suitable to international distance learning class than the science.
- Science and technology are suitable to WBT.

Kyoto University

Summary

- Market in Asia will become large due to the population in this region
  - China and India will become big markets
- IT has a new possibility for education
  - Supporting the conventional education is also important
- Cultural problem is very important in considering global eLearning
  - How to match or how to change the regulations
  - What style of eLearning is preferred
  - How to make the contents of education

Kyoto University

Thank you for your attention

Kyoto University

China and India

- China and India become large market in eLearning if the IT infrastructure develops.

- Chinese speaking population is so large
- India has no language problem

Kyoto University